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### **INFORMATION DISCLOSURE CITATION**

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Atty. Socreto	2514.0051-01	Appln. No.	10/050,121	AUG 273
Applicant	Randolph M. HOWES	-		IECH CENTER (U03
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U.S. PATENT DOCUMENTS							
Examiner Initial*	Document Number	Issue Date	Name	Class	Sub Class	Filing Date If Appropriate	

	FOREIGN PATE	T DOCUMENT	S		
Document Number	Publication Date	Country	Class	Sub Class	Translation Yes or No
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	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
# 4	Thomas, Rhys N., "Singlet Oxygen Disinfection of Drinking Water," Abstracts of Awards for Fiscal Year 1999, <i>Robert C. Byrd</i> National Technology Transfer Center, 2 pages.
	Chan, Jim, "Intravenous Hydrogen Peroxide Therapy," <a href="http://www.drjimchan.com/hydrogen.html">http://www.drjimchan.com/hydrogen.html</a> , 2002-2003, 3 pages.
	Ben-Yoseph, O. et al., Oxidation Therapy: The Use of a Reactive Oxygen Species-Generating Enzyme System for Tumour Treatment," Br J Cancer. 1994, Dec 70(6):1131-5.
	Werner, Jochen A., et al., "Intratumoral Cisplatin/Epinephrine (CDDP/epi) Injectable Gel for Treatment of Head and Neck Concern Squamous Cell Carcinoma (HNSCC) Provides Local Tumor Control and Improved Quality of Life (QoL): Phase III Multicenter Studies," European Society for Medical Oncology, Abstract No.: 406PD, Citation: Annals of Oncology, Vol. 11, Suppl. 4 Oct 2000, page 91, 2 pages.
TI)	"Ethanol Injection," West Penn Allegheny Health System Liver Cancer Network, hhtp://www.livercancer.com/treatments/alcohol.html, 2002, 3 pages.

Examiner	Sher Ob	Date Considered (2////03
*Examiner:		sidered, whether or not citation is in conformance with MPEP 609; draw line in conformance and not considered. Include copy of this form with next licant.
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Atty: BRADE No.	2514.0051-01	Appin. No.	10/050,121	TECHOR	2003
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Filing Date	January 18, 2002	Group:	1614		100/2900

U.S. PATENT DOCUMENTS							
Examiner Initial*	Document Number	Issue Date	Name	Class	Sub Class	Filing Date If Appropriate	
#C	6,165,415	Dec. 26, 2000	Hunt et al.	422	28		
$\neg \forall \vdash$	6,149,819	Nov. 21, 2000	Martin et al.	210	743		
	6,139,796	Oct. 31, 2000	Kristiansson et al.	422	22		
	6,119,854	Sep. 19, 2000	Prentice et al.	206	209.1		
	6,100,290	Aug. 8, 2000	Levy et al.	514	410		
	6,082,588	July 4, 2000	Markey et al.	222	137		
	6,054,423	Apr. 25, 2000	McGill	510	191		
	6,047,861	Apr. 11, 2000	Vidal et al.	222	137		
	6,047,818	Apr. 11, 2000	Warby et al.	206	221		
	6,036,005	Mar. 14, 2000	Krause et al.	206	221		
	6,033,704	Mar. 7, 2000	Talley	426	320		
	6,033,662	Mar. 7, 2000	Allen	424	94.49		
	6,011,563	Jan. 4, 2000	Fournier et al.	345	500	<u> </u>	
	5,934,515	Aug. 10, 1999	Bennett	222	153.14		
· ·	5,921,440	July 13, 1999	Maines	222	145.2		
	5,899,362	May 4, 1999	Moran	222	136		
	5,887,755	Mar. 30, 1999	Hood, III	222	135		
	5,885,557	Mar. 23, 1999	Lentini	424	59		
	5,882,526	Mar. 16, 1999	Brown et al.	210	753		
	5,860,565	Jan. 19, 1999	Winston et al.	222	1		
	5,848,730	Dec. 15, 1998	Kawase et al.	222	94		
	5,830,526	Nov. 3, 1998	Wilson et al.	427	2.1		
_	5,819,987	Oct. 13, 1998	Miller	222	135		
	5,807,881	Sep. 15, 1998	Leong et al.	514	410		
<del></del>	5,773,460	June 30, 1998	Gaboury et al.	514	454		
~	5,731,008	Mar. 24, 1998	Morrow	424	613		
77	5,702,182	Dec. 30, 1997	Alvarado	366	130		

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TECH CENTER 1600/2900 Atty. Docket No. Appln. No. 10/050,121 2514.0051-01 Randolph M. Howes Applicant 1614 Group: January 18, 2002 Filing Date

U.S. PATENT DOCUMENTS							
Examiner Initial*	Document Number	Issue Date	Name	Class	Sub Class	Filing Date If Appropriate	
A	5,679,661	Oct. 21, 1997	Willey	514	63		
$ M$ $\overline{}$	5,611,793	Mar. 18, 1997	Wilson et al.	606	2		
	5,606,255	Feb. 25, 1997	Reidel et al.	222	137		
	5,566,860	Oct. 22, 1996	Schlitz et al.	222	94		
	5,560,545	Oct. 1, 1996	Grogan et al.	239	304		
	5,494,190	Feb. 27, 1996	Boettcher	222	135		
	5,472,715	Dec. 5, 1995	Uehara	424	613		
	5,435,076	July 25, 1995	Hjertman et al.	34	296		
	5,429,301	July 4,_1995	Franks	_239	1		
	5,424,032	June 13, 1995	Christensen et al.	422	14		
	5,398,846	Mar. 21, 1995	Corba et al.	222	1		
	5,398,483	Mar. 21, 1995	Smith et al.	53	474		
	5,392,904	Feb. 28, 1995	Frick et al.	206	219		
	5,395,270	Jan. 31, 1995	Cataneo et al.	222	134		
	5,357,636	Oct. 25, 1994	Dresdner, Jr. et al.	2	161.7		
	5,289,950	Mar. 1, 1994	Gentile	222	142.3		
	5,272,142	Dec. 21, 1993	Sessier et al.	514	185		
	5,264,525	Nov. 23, 1993	Lees	525	154		
	5,256,182	Oct. 26, 1993	Friedman, Jr. et al.	504	124		
	5,252,312	Oct. 12, 1993	Gentile et al.	424	44		
	5,246,142	Sep. 21, 1993	DiPalma et al.	222	129		
	5,244,671	Sep. 14, 1993	Vogel et al.	424	450		
	5,244,121	Sep. 14, 1993	Shomer	222	102		
	5,223,245	June 29, 1993	Ibrahim et al.	424	7.1		
_	5,154,917	Oct. 13, 1992	Ibrahim et al.	424	7.1		
	5,152,461	Oct. 6, 1992	Proctor	239	304		
7	5,052,590	Oct. 1, 1991	Ratcliff	222	94		



OMB No. 0654-0011

Atty. Docket No.	2514.0051-01	Appln. No. 10/050,121	ECH COM ? 2000
Applicant	Randolph M. Howes		WIND STATE
Filing Date	January 18, 2002	Group: 1614	1000/2000

Examiner Initial*	Document Number	Issue Date	Name	Class	Sub Class	Filing Date If Appropriate
1(1)	5,009,342	Apr. 23, 1991	Lawrence et al.	222	136	
<del>-                                    </del>	4,993,594	Feb. 19, 1991	Becker et al.	222	48	
	4,979,942	Dec. 25, 1990	Wolf et al.	604	83	
	4,979,935	Dec. 25, 1990	Lindmayer	600	2	
	4,972,969	Nov. 27, 1990	Randklev	222	1	
	4,971,991	Nov. 21, 1990	Umemura et al.	514	410	
	4,969,579	Nov. 13, 1990	Behar	222	136	
	4,858,759	Aug. 22, 1989	Mauthe et al.	206	221	
	4,850,729	Jul. 25, 1989	Kramer et al.	401	_183	
	4,826,048	May 2, 1989	Skorka et al.	222	137	
	4,772,031	Sep. 20, 1988	Рорро	277	1	
	4,767,025	Aug. 30, 1988	Gebauer et al.	222	135	
	4,675,174	June 23, 1987	Eckenhoff	424	15	
	4,670,252	June 2, 1987	Sampathkumar	424	53	
	4,640,782	Feb. 3, 1987	Burleson	210	748	
	4,592,487	June 3, 1986	Simon et al.	222	94	
	4,566,610	Jan. 28, 1986	Herb	222	137	
	4,549,674	Oct. 29, 1985	Alticosalian	222	48	
	4,355,739	Oct. 26, 1982	Vierkötter	222	134	
	4,317,814	Mar. 2, 1982	Laso	424	130	
	4,314,652	Feb. 9, 1982	Cooper	222	1	
	4,243,525	Jan. 6, 1981	Greenberg	210	754	
	4,265,372	May 5, 1981	Wainberg	222	82	
	4,235,332	Nov. 25, 1980	Andersen et al.	206	219	
	4,220,529	Sep. 2, 1980	Daude-Lagrave	210	758	
		May 20, 1980	Theeuwes	128	260	
	4,203,441	May 20, 1980 Mar. 18, 1980		128 366	130	<u> </u>



OMB Nov, 0651-0012-0 ECH CENTER 1600/2900 Atty DOMENO Appln. No. 10/050,121 2514.0051-01 Randolph M. Howes **Applicant** 1614 Group: January 18, 2002 Filing Date

U.S. PATENT DOCUMENTS							
Examiner Initial*	Document Number	Issue Date	Name	Class	Sub Class	Filing Date If Appropriate	
d.	3,992,003	Nov. 16, 1976	Visceglia et al.	272	94		
77-	3,966,090	June 29, 1976	Prussin et al.	222	94		
	3,964,643	June 22, 1976	Morane et al.	222	145		
	3,802,604	Apr. 9, 1974	Morane et al.	222	83		
	3,786,963	Jan. 22, 1974	Metzler, III	222	136		
	3,776,775	Dec. 4, 1973	Lazarus	134	42		
	3,760,986	Sep. 25, 1973	Castner et al.	222	137		
	3,756,390	Sep. 4, 1973	Abbey et al.	206	47 A		
	3,765,389	Sep. 4, 1973	Firth	206	47 A		
	3,669,891	June 13, 1972	Greenwood et al.	252	90		
	3,635,375	Jan. 18, 1972	Gaetke	222	94		
	3,540,623	Nov. 17, 1970	Wittke et al.	222	94	<u> </u>	
	3,455,489	July 15, 1969	Meshberg	222	94		
	3,416,709	Dec. 17, 1968	Shultz et al.	222	94		
	3,325,056	June 13, 1967	Lewis	222	94		
	3,269,389	Aug. 30, 1966	Meurer et al.	128	198		
	3,240,328	Mar. 15, 1966	Matteuzzi	206	47		
	3,166,221	Jan. 19, 1965	Nielsen	222	137		
	2,941,696	June 21, 1960	Homm	222	136		
AL	1,639,699	Aug. 23, 1927	Hopkins			1	

FOREIGN PATENT DOCUMENTS							
	Document Number	Publication Date	Country	Class	Sub Class	Translation Yes or No	
R	GB 2207354 A	Feb. 1, 1989	Great Britain				
<del>-                                    </del>	DE 4,105,386	Aug. 27, 1992	Germany			Abstract only	
	WO 93/00815	Jan. 21, 1993	PCT				
(A)	JP 7018298	Jan. 20, 1995	Japan			Abstract only	

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Atty. Decker 2514.0051-01		Appln. No.	10/050,121	ECHO 13 2 EV	
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· · · · · · · · · · · · · · · · · · ·	Document Number	Publication Date	Country	Class	Sub Class	Translation Yes or No
L	✓ JP 10295784	Nov. 10, 1998	Japan			Abstract only

	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
A	"Generation of Singlet Oxygen" @ http://mdenk.erin.utoronto.ca/Lectures/231%20lefture/lecturemanuscript.htm, 2 pgs.
	"Singlet Oxygen: Generation and Properties" @ http://www.photobiology.com/educational/len2/singox.html, 1 pg.
	www.chem.mtu.edu/pcharles/research/thesis/ch01/homepage; Chapter One, 27 pgs.
	Brestel, <u>Biochemical and Biophysical Research Communications</u> , "Co-Oxidation of Luminol by Hypochlorite and Hydrogen Peroxide Implications for Neutrophil Chemiluminescence," Vol. 126, No. 1, January 16, 1985, pp. 482-488.
	Dougherty, Oncology, "Photodynamic Therapy: Status and Potential," Vol.3, No.7, July 1989, pp. 67-78.
	Foote et al., <u>Journal of American Chemical Society</u> , "Chemistry of Singlet Oxygen. IV. Oxygenations with Hypochlorite-Hydrogen Peroxide," 90:4, Feb. 14, 1968, pp. 975-981.
	Fritsch et al., <u>Archives of Dermatology</u> , "Photodynamic Therapy in Dermatology," Vol. 134, Feb. 1998, pp. 207-214
	Fritsch et al., Skin Pharmacology and Applied Skin Physiology, "Photodynamic Diagnosis and Therapy in Dermatology," 11:358-373, 1998, pp. 358-373.
	Grossweiner, www.bio-laser.org/singlet%20 oxygen.html, " Singlet Oxygen: Generation and Properties," 15 pages.
	Hsi et al., <u>Drugs</u> , "Photodynamic Therapy in the Treatment of Cancer," Vol. 57, No.5 725-734, May 1999, pp. 725-734.
	Kanofsky, <u>Biochemical and Biophysical Research Communications</u> , "Catalysis of Singlet Oxygen Production in the Reaction of Hydrogen Peroxide and Hypochlorous Acid by 1,4-Diazabicyclo[2.2.2]Octane (DABCO)," Vol. 134, No. 2, January 29, 1986, pp. 777-782.
	Kanofsky, <u>ChemBiol. Interactions</u> , "Singlet Oxygen Production by Biological Systems," Vol. 7, No. 1, 2, 1989, pp. 1-28.
	Klebanoff, <u>Proceedings of the Association of American Physisions</u> , "Myeloperoxidase," Vol. III, No. 5, September/October 1999, pp. 383-389.
	Kurwa et al., Clinical and Experimental Dermatology, "The role of photodynamic therapy in dermatology," 24, 1999, pp. 143-148.
A.	Mascio et al., <u>FEBS Letters</u> , "Singlet molecular oxygen production in the reaction of peroxynitrite with hydrogen peroxide," Vol. 355, No. 3, 5 December 1994, pp. 287-289.

Page 5 of 6

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OMB NA 0651-0011

Atty. Docket	PADEN 014.0051-01	Appln. No.	10/050,121	ECK, OF 27 ED
Applicant	Randolph M. Howes			ENTE 2003
Filing Date	January 18, 2002	Group:	1614	1600
	OTHER DOCUMENTS (Incl	uding Author Title D	ate. Pertinent P	rages, Etc.)

- Illing Date	Sandary 10, 200
	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
A	Mattie, www.ee.surrey.ac.uk/SSC/ H202CONF/dmattie.htm, "Toxicity of Rocket Fuels: Comparison of Hydrogen," 6 pages.
	McCaughan Jr., <u>Drugs &amp; Aging</u> , "Photodynamic Therapy, A Review," Vol. 15, No. 1, July 1999, pp. 50-68.
	Morikasa et al., <u>Cancer Research</u> , "Hydrogen Peroxide as a Tumoricidal Mediator of Murine Polymorphonuclear Leukocytes Induced by a Linear β-1,3-p-Glucan and Some Other Immunomodulators," Vol. 45, August 1985, pp. 3482-3486.
	Panasenko et al., <u>Biochemistry (Moscow)</u> , "Hypochlorite Reacts with an Organic Hydroperoxide Forming Free Radicals, but not Singlet Oxygen, and Thus Initiates Lipid Peroxidation," Vol. 62, No. 9, September 1997, pp. 951-959.
	Piatt et al., <u>European Journal of Biochemistry</u> , "Singlet Oxygen Formation by a Peroxidase, H <sub>2</sub> O <sub>2</sub> and Halide System, Vol. 93, No. 2, January 1979, pp. 323-332.
	Poulakkainen et al., <u>Annales Chirurgiae et Gynaecologiae</u> , "Photodynamic Therapy," Vol. 79, No. 4, 1990, pp. 240-243.
	Van Rensburg et al., <u>Mutation Research</u> , "Hypochlorous acid potentiates hydrogen peroxide-mediated DNA-strand breaks in human mononuclear leucocytes," Vol. 265, No. 2, February 1992, pp. 255-261.
	Sies et al., <u>Toxicology Letters</u> , "Role of reactive oxygen species to cell toxicity," Vols. 64/65, 1992, pp. 547-551.
	Tatsuzawa et al., <u>Biochemical and Biophysical Research Communications</u> , "Singlet Oxygen ( $^1\Delta_gO_2$ ) as the Principal Oxidant in Myeloperoxidase-Mediated Bacterial Killing in Neutrophil Phagosome," Vol. 262, No. 3, September 7, 1999, pp. 647-650.
The state of the s	Weiss et al., <u>The Journal Clinical Investigation</u> , "Monocyte and Granulocyte-mediated Tumor Cell Destruction," Vol. 69, February 1982, pp. 255-262.

Examiner	Dray Clos	Date Considered	12/		/ 07			
*Examiner:	A Company of the conformance with MPEP 600, draw line							
Form PTO 1449		Patent and Trademark Office	- U.S	. D	epartment of Comn	nerce		